# Level 1 At-launch PGEs

Ed Masuoka 7/13/99

#### Overview

- Level 1 PGE versions and readiness
- Need for GDAAC/MODAPS joint testing
- Schedule for joint test
- Strategy for joint testing

#### Level 1 PGEs for MOSS-2

PGE	Process	Version	GDAAC	Status	Comments
			Received		
1	L1A	2.1	5/21	ops	Done
1	Geo.	2.1.1	5/21	ops	Done
2	L1B	2.1.5	4/30	test	Need 2.1.6 LUT update
3	Cloud	2.1.0	4/30	test	week Promote of 7/ to 12 ops during
	Mask				
3	Profiles	2.1	4/30	test	Promote to ops during week of 7/12
3	Volcano		4/30	test	Promote to ops during week of 7/12
71	Subsetter				Not in MOSS-2

#### Level 1 PGEs for Launch

PGE	Process	Version	GDAAC	Status	Comments
			Received		
1	LIA	2.1	5/21	ops	Done
1	Geo.	2.1.1	5/21	ops	Done
2	L1B	2.1.6	~ 7/15	ops	Should be promoted to ops before 7/21 for MOSS
2	L1B	2.2.0	6/3	test	Works with 2.1.6 synthetic data? Better physics
3	Cloud Mask	2.4.1	6/17	test	ESDT needed from ECS Promote by 8/24
3	Profiles	2.1	4/30	test	Done
3	Volcano		4/30	test	Done
71	Subsetter	2.0.2	7/7	test	ESDT needed from ECS, Promote by 8/24

## Why a joint production test?

- Problems have severely limited the volume of Level 1 products transferred to MODAPs in MOSS-2
  - GDAAC identified following ECS problems:
    - ECS distribution server not stable
    - DPREP doesn't handle gaps well
    - Production plans not easy to modify
  - We can not make a reasonable volume of L2+ products from the limited **L1** product flow
- ECS Version 5A will be installed at DAACs in July and needs to be tested in production before launch
- MOSS 2 will not test 5A thus will not test insertion of products into archive via SIPS interface

#### Joint production test

- After MOSS-2 (7/28)
- At full production rates (lx DAAC, .5x MODAPS)
- At least 8-days of joint production
- Includes Q/A ordering and updates
- Includes ingest of L2-L3 products at DAACs

### Production Test Requires

- Promoted L1 PGEs
  - 2-8 weeks from final delivery to running in ops
  - 4- 10 weeks from first delivery to final delivery
- Synthetic LO test data compatible with L1B
  - 2 weeks from definition of L1B to develop inverter
  - 2 weeks to debug inverter and/or modify L1B
  - 2 weeks to generate LO data
- Operational ECS system (5A or 4PY)
- Operational PDR server and networks
- Operational MODAPS (Version 1)

#### Schedule Based on 10/4 launch

11/9	First Earth view data
1 0/25	First MODIS data
10/18	Clean-out databases for production at GDAAC
10/17	End joint production test
10/4	Launch
9/1	Begin joint production test GDAAC/MODAPS
8/24	Promote Launch Ready PGEs and ECS 5A to ops
8/10	<b>Operations Readiness Review</b>
8/6	Fully tested at-launch PGEs to GDAAC with synthetic data
7/28	MOSS 2 formal test ends
7/22	ECS 5A scheduled for installation at GSFC DAAC
	• ESDTs for PGE03 and PGE71

## Approach to testing

- Use Ll PGEs that are promoted to ops by 8/24 and for which compatible synthetic data exists
  L1B will probably be V2.1.6
- New versions of L1B will be tested at GDAAC but will not be promoted to ops until joint production test ends or they are shown to be compatible with test data from V2.1.6.

## Remaining questions about L 1B

- Should GDAAC stop SSI&T on V2.2.0?
- How important is it to get V2.2.1 in before launch?
  - What is last day to get V2.2.1 to GDAAC and have it integrated by launch?
- What analyses or testing is needed of V2.2.1 or V2.2.0?